

Claims:

What I claim as my invention is:

Claims 1-46 (Cancelled)

47. (New) A micro sensor tip for measuring an analyte in a sample for minimally invasive diagnostic use comprising: an elongated, light conducting medium between the light emitting/detecting sources and the reagent pad; said light conducting medium being a piece of solid, micro optical fiber with two equal ends; a reagent pad containing all the necessary chemicals and enzymes for a specified analysis; said reagent pad being mounted to one end of said optical fiber.
48. (New) The sensor of claim 47, wherein the tip is disposable.
49. (New) The sensor of claim 47, wherein the reagent pad is a membrane impregnated with dry chemicals and enzymes.
50. (New) The sensor of claim 47, wherein said reagent pad is a cast membrane which contains all the required chemicals and enzymes for a specified analysis.
51. (New) The sensor of claim 47, wherein said optical fiber is made of glass/glass, or plastic/plastic, or glass/plastic.
52. (New) The sensor of claim 47, wherein the capable measurement sample volume by reflecting light is less than 3 μl ; preferably less than 1 μl ; more preferably, less than 0.5 μl .

53. (New) A tubular micro sensor tip for measuring an analyte in a sample comprising: an elongated piece of micro plastic tubing with two ends of equal size; a reagent pad containing all the necessary chemicals and enzymes for a specified analysis; said reagent pad being mounted to one end of said tubing.
54. (New) The sensor of claim 53, wherein the tubular tip is disposable.
55. (New) The sensor of claim 53, wherein the reagent pad is a membrane impregnated with dry chemicals and enzymes.
56. (New) The sensor of claim 53, wherein said reagent pad is a cast membrane which contains all the required chemicals and enzymes for a specified analysis.
57. (New) The sensor of claim 53, wherein said fiber optic probe is made of glass/glass, or plastic/plastic, or glass/plastic.
58. (New) The sensor of claim 53, wherein the capable measurement sample volume by reflecting light is less than 3 μl ; preferably less than 1 μl ; more preferably, less than 0.5 μl .